



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/598,313

06/25/2008

David P. Prentice

W-391-02

2604

43840 7590 09/20/2010

Waters Technologies Corporation  
34 MAPLE STREET - LG  
MILFORD, MA 01757

EXAMINER

THERKORN, ERNEST G

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

09/20/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,313	<b>Applicant(s)</b> PRENTICE ET AL.	
	<b>Examiner</b> Ernest G. Therkorn	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 6, 7, 9/6, 9/7, and 11-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 9/8, and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. "minimizes" renders the claim indefinite because it is a method limitation in an apparatus claim.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695). At best, the claims differ from Parkell (U.S. Patent No. 4,019,372) in reciting use of a housing with a heater. Schneider (U.S. Patent No. 5,238,557) (column 3, line 27, column 4, line 13) discloses that a column receiving piece, i.e., a housing, allows for temperature control of the column. Joshua (U.S. Patent No. 4,966,695) (column 6, lines 54-66) discloses that use of a container permits thermal control and facilitates inspection, repair, or replacement of the column. It would have been obvious to use a housing with a heater in Parkell (U.S. Patent No. 4,019,372) either because Schneider (U.S. Patent No. 5,238,557) (column 3, line 27, column 4, line 13) discloses that a column receiving piece, i.e., a housing, allows for temperature control of the column or because Joshua (U.S. Patent

Art Unit: 1797

No. 4,966,695) (column 6, lines 54-66) discloses that use of a container permits thermal control and facilitates inspection, repair, or replacement of the column.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) as applied to claims 1, 2, and 10 above, and further in view of Kashima (U.S. Patent No. 5,083,158) and Kiang (U.S. Patent No. 4,732,672). At best, the claims differ from Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) in reciting use of a cradle. Kashima (U.S. Patent No. 5,083,158) (column 3, lines 35-38 and 58-61) discloses that it is desirable to have a cartridge located in a pivotable cover for replacement. Kiang (U.S. Patent No. 4,732,672) (column 2, lines 44-62) discloses that chromatography columns use quick mounting and demounting connectors. It would have been obvious to use a cradle in Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) because Kashima (U.S. Patent No. 5,083,158) (column 3, lines 35-38 and 58-61) discloses that it is desirable to have a cartridge located in a pivotable cover for replacement and because Kiang (U.S. Patent No. 4,732,672) (column 2, lines 44-62) discloses that chromatography columns use quick mounting and demounting connectors.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695), Kashima (U.S. Patent No.

Art Unit: 1797

5,083,158), and Kiang (U.S. Patent No. 4,732,672) as applied to claims 3-5 above, and further in view of Zelinka (U.S. Patent No. 4,484,061). At best, the claims differ from Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695), Kashima (U.S. Patent No. 5,083,158), and Kiang (U.S. Patent No. 4,732,672) in reciting use of an electrical circuit. Zelinka (U.S. Patent No. 4,484,061) (Abstract) discloses use of electric heating elements allow a gradient over the length of the column. It would have been obvious to use an electric circuit in Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695), Kashima (U.S. Patent No. 5,083,158), and Kiang (U.S. Patent No. 4,732,672) because Zelinka (U.S. Patent No. 4,484,061) (Abstract) discloses use of electric heating elements allow a gradient over the length of the column.

Claims 8 and 9/8 rejected under 35 U.S.C. 103(a) as being unpatentable over Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) as applied to claims 1, 2, and 10 above, and further in view of either Shalon (U.S. Patent No. 6,036,855) or Allington (U.S. Patent No. 6,294,088). At best, the claims differ from Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) in reciting use of a hinge. Shalon (U.S. Patent No. 6,036,855) (column 5, lines 6-35) discloses pivoting members allow a column to be positioned into place. Allington (U.S. Patent No. 6,294,088) (column 18, lines 49-52) discloses that use of a hinge permits pivoting. It would have been obvious to use a hinge in Parkell (U.S.

Art Unit: 1797

Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) either because Shalon (U.S. Patent No. 6,036,855) (column 5, lines 6-35) discloses pivoting members allow a column to be positioned into place or because Allington (U.S. Patent No. 6,294,088) (column 18, lines 49-52) discloses that use of a hinge permits pivoting.

The restriction and election of species requirements have been reconsidered, deemed proper, and made final for the reasons of record.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ernest G. Therkorn/  
**Ernest G. Therkorn**  
**Primary Examiner**  
**Art Unit 1797**

EGT  
September 16, 2010